CLAIMS

We claim:

1. A tactile input system comprising multiple stimulators implanted in the skin of a subject below the epidermis in a closely spaced array, wherein the stimulators or a portion thereof are independently configured to deliver a tactile stimulation.

2. The system of claim 1, wherein said tactile stimulation is mechanical stimulation.

3. The system of claim 1, wherein said tactile stimulation is electrical stimulation.

4. The system of claim 1, wherein said tactile stimulation is thermal stimulation.

5. The system of claim 1, wherein said stimulators are configured to provide said tactile stimulation in response to a wireless signal.

6. The system of claim 5, wherein said wireless signal comprises a light signal.

7. The system of claim 1, wherein said stimulators are provided with a biocompatible coating.

8. The system of claim 1, further comprising a transmitter configured to transmit a signal to one or more of said stimulators to initiate said tactile stimulation.

9. The system of claim 1, wherein said stimulators individually have a volume of less than 10 cubic millimeters.

10. The system of claim 1, wherein said stimulators comprise a movable diaphragm.

11. The system of claim 1, wherein said stimulators are not in direct or indirect physical contact with each other.

12. An implantable tactile input system comprising multiple stimulators configured to be implanted in the skin of a subject below the epidermis in a closely spaced array, wherein the stimulators or a portion thereof are independently configured to deliver a tactile stimulation to said subject when implanted.

13. The system of claim 12, wherein said tactile stimulation is mechanical stimulation.

14. The system of claim 12, wherein said tactile stimulation is electrical stimulation.

15. The system of claim 12, wherein said tactile stimulation is thermal stimulation.

16. The system of claim 12, wherein said stimulators are configured to provide said tactile stimulation in response to a wireless signal.

17. The system of claim 16, wherein said wireless signal comprises a light signal.

18. The system of claim 12, wherein said stimulators are provided with a biocompatible coating.

19. The system of claim 12, further comprising a transmitter configured to transmit a signal to one or more of said stimulators to initiate said tactile stimulation.

20. The system of claim 12, wherein said stimulators individually have a volume of less than 10 cubic millimeters.

21. The system of claim 12, wherein said stimulators comprise a movable diaphragm.

22. The system of claim 12, wherein said stimulators are not in direct or indirect physical contact with each other.

23. A method for imparting information to a subject comprising: transmitting a signal from a transmitter to multiple stimulators implanted in the skin of said subject under conditions such that said stimulators provide a tactile stimulation that conveys information from said signal to the brain of said subject.

24. The method of claim 23, wherein said stimulators are implanted below the epidermis in a closely spaced array.

25. The method of claim 23, wherein said stimulators or a portion thereof are independently configured to deliver said tactile stimulation.

26. The method of claim 23, wherein said tactile stimulation is mechanical stimulation.

27. The method of claim 23, wherein said tactile stimulation is electrical stimulation.

28 The method of claim 23, wherein said tactile stimulation is thermal stimulation.

29. The method of claim 23, wherein said stimulators are configured to provide said tactile stimulation in response to a wireless signal.

30. The method of claim 29, wherein said wireless signal comprises a light signal.

31. The method of claim 23, wherein said information comprises visual information.

32. The method of claim 23, wherein said information comprises audio information.

33. The method of claim 23, wherein said information comprises environmental information.

34. The method of claim 23, wherein said information comprises tactile information from a body location other than the location where said multiple stimulators are implanted.